The Role of Metrics in Sustaining Sponsorship

Steve Janiszewski explains why metrics are the key to success with SPI

The key pre-requisite to successful process improvement initiative is strong sponsorship. Unless the boss makes it clear to all concerned that a particular organizational change is a priority, that change will not happen. "Making it clear" involves constantly being visible, showing an interest, making inquiries, and actively promoting the change.

Frequently sponsorship for CMM based improvements is motivated by a desired to remain competitive with a certain type of customer. Sometimes the boss just feels that the CMM makes sense, and it is obviously the right way to proceed. This is frequently enough to get an organization started along the path to a higher CMM level, but often it is not enough to sustain it on that path.

How strong will the sponsorship be when faced with the need to reduce expenses? What will happen when a new manager takes over? A fundamentally good improvement program can drastically cut back or even eliminated.

We ran into a pretty extreme, but not totally atypical, example of this last year. The company was in the financial services business and it had several thousand programmers. The improvement initiative had very strong sponsorship from the CEO who had a good understanding of the CMM and felt it was a sensible way to do business. He measured progress by assessments that indicated steady improvement as his organization moved from level 1 to 3 in about 4 years.

Then he was replaced. The new CEO's first question about SPI was: "What does it cost?" His second question was: "What is the return?" It was easy to compute the cost. However the SEPG could not credibly quantify the savings. They had a lot of anecdotal stories about the value of inspections, and they had some slides about typical industry data. But they had chosen to put off a serious metrics program until they got to level 3, so there was very little hard internal data on savings. A few weeks later the CMM initiative was canceled and SEPG was out of work.

The point of the story is that you can't wait till level three to start measuring your process. You need to measure cost, cycle time, and quality before you make any process changes. You need to measure them again after each change. You need to measure the cost of the change and quantify the return on investment. If you are not getting the expected return on your investment, you need to take prompt corrective action until you do. All of this should be documented in a quarterly report to the sponsor.

I learned this when I managed a mid size software organization at AlliedSignal. We moved from level 1 to level 4 in about 5 years, quite an achievement. But we did in the face of three re-organizations. The secret to sustaining executive sponsorship was "zero-based" budgeting. Every year, every line item in my department budget was zeroed and I had to write a proposed budget that quantified costs and projected benefits for everything we spent, including SPI.

We constantly looked at our process metrics and managed the process to hit our budgetary goals. When a new general manager took over, I would pull together a briefing show all the costs and all the returns. If he were to ask me what would happen if we cut out inspections, I could go to the data, and credibly show him that our costs and cycle times would increase. We never lost our sponsorship because we could make a direct connection to business goals. And that was the real key to sustained success with SPI.